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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,214

07/17/2006

Jennifer Jane Gordon

CB60684

2772

20462

7590

09/04/2008

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EXAMINER

SUTTON, DARRYL C

ART UNIT

PAPER NUMBER

1612

NOTIFICATION DATE

DELIVERY MODE

09/04/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

US\_cipkop@gsk.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/586,214	<b>Applicant(s)</b> GORDON ET AL.	
	<b>Examiner</b> DARRYL C. SUTTON	<b>Art Unit</b> 1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05/30/2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office Action is in response to the amendment filed 05/30/2008. New claims 9 and 10 have been added. Claims 7 and 8 have been cancelled.

Applicant's arguments filed 05/30/2008 have been fully considered. Rejections and/or objections not reiterated from previous Office Actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prosise et al. (U.S. 2004/0086468).

Prosise et al. teaches a Tooth Whitening Delivery System comprised of PVP-hydrogen peroxide complex, glycerol, hydroxypropylmethylcellulose, ethylcellulose and ethanol (paragraphs [0015], [0017]). The ethanol solvent evaporates and once dried, a film of the composition adheres to the teeth for about 1 hour, which was sufficient for teeth bleaching to occur upon repeated use paragraph [0017]. The film is made of ethyl

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cellulose and crosslinked or uncrosslinked PVP-H<sub>2</sub>O<sub>2</sub>, hydroxypropylmethylcellulose is an **optional** component of the composition (paragraph 0011]).

Prosise does not teach the weight percentages of insoluble film forming agent in the composition.

Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges through routine experimentation. See MPEP 2144.05. Since the invention of Prosise et al. can be prepared with ethyl cellulose as the only film forming agent, it would be obvious to find the optimum or workable weight percentage of ethyl cellulose in the absence of hydroxypropylmethylcellulose. This optimization is realized through routine experimentation by varying the amount of ethyl cellulose in the composition.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prosise et al. as applied to claims 1-6 above, and further in view of Diasti et al. (U.S. Patent 6,517,350).

Prosise et al. is discussed above.

Prosise et al. does not teach that the composition remained in contact with the teeth for a plurality of hours per day, once it is painted onto teeth.

Diasti et al. teaches a tooth whitening compound with a carrier selected for adhering to a patient's teeth; and that the whitening compound is applied to the teeth by methods including painting or coating (Abstract). Diasti et al. teaches that the invention provides a whitening system and method which reduces or eliminates the annoyance of

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wearing pre-made trays or adhesive-type products (column 3, lines 32-36). Diasti et al. teaches an embodiment of the invention comprising a container for holding the whitening compound and a brush for applying the whitening agent (column 4, lines 35-60). Diasti et al. also teaches that the compound can be easily removed and additional applications of the compounds applied (column 10, lines 16-24).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the methods of Prosise et al. to those of Diasti et al. and to apply the whitening composition directly to the teeth since the modified method would eliminate the annoyance to the consumer of wearing pre-made adhesive-type products and eliminate a processing step in the preparation of the whitening composition of Prosise et al.

Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges through routine experimentation. See MPEP 2144.05. Therefore, it would have been obvious to determine the optimum administration schedule, i.e. amount of time each day, for the modified composition of Prosise et al. to remain in contact with the teeth to provide sufficient bleaching upon repeated use.

No claims are allowed.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darryl C. Sutton whose telephone number is (571)270-3286. The examiner can normally be reached on M-Th from 7:30AM to 5:00PM EST or on Fr from 7:30AM to 4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass, can be reached at (571)272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Darryl C Sutton/  
Examiner, Art Unit 1612

/Frederick Krass/  
Supervisory Patent Examiner, Art Unit 1612